IN THE SPECIFICATION:

Please amend the specification as follows.

Please amend the second full paragraph on Page 3 beginning on line 8, and ending on line 16 to read as follows:

To attain above objects, in the method of cluster management of network devices of the present invention, a plurality of network devices compose a cluster, wherein at least one network device is set as the cluster management device and configured with a public IP address; other network devices are configured and updated with private IP addresses and routes by said cluster management device; said ~~network~~ cluster management device manages the network devices in the cluster according to the following steps of:

Please amend the second full paragraph on Page 5 beginning on line 11 to read as follows:

Said configuring the cluster management device correspondingly as described in step (1) includes configuring the following items on the device: cluster name, enable state of cluster, management IP address pool of cluster, state retention time of cluster, handshaking time interval of member devices, role of the cluster management device in the cluster, and IP address of the cluster management device.

Please amend the fifth full paragraph on Page 5 beginning on line 23 to read as follows:

(A2) determining whether it can be added to the cluster or not according to its own condition by each ~~the~~ candidate device; if the candidate device can not be added to the cluster, feeding back a reject response and terminating the cluster addition process; otherwise feeding back an accept response to the cluster management device;

Please amend the first full paragraph on Page 6 beginning on line 8 to read as follows:

In step (A2), determining whether the candidate device itself can be added to the cluster is implemented through determining whether the candidate device has already been in another cluster and whether software version in the candidate device supports cluster management.

Please amend the second full paragraph on Page 6 beginning on line 13 to read as follows:

In step (A2), before feeding back the accept response to be added to the cluster to the cluster management device, the candidate device will determine whether a super user password is set on itself; if a super user password has not been set, the candidate device feeds back the accept response message to be added to the cluster directly; if a super user password has been set, the candidate device feeds back an authentication request to the cluster management device; then, the candidate device authenticates itself according to the authentication information sent from the cluster management device; if the authentication is successful, the candidate device feeds back the accept response to be

added to the cluster; otherwise feeds back a reject response to be added to the cluster to the cluster management device.

Please amend the first full paragraph on Page 7 beginning on line 3 to read as follows:

The ~~identification~~ configuration of each member device added to the cluster in step (4) is performed with a data structure comprising the following fields:

Please amend the fourth full paragraph on Page 7 beginning on line 10 to read as follows:

In above network device management method, in step (1), said cluster management device establishes IP data channels via said cluster management device between said network management device and the network devices in the cluster with stream transform technology or network address translation technology.

Please amend the fifth paragraph on Page 7 beginning on line 16 to read as follows:

The cluster management apparatus for network devices according to the present invention comprises: a cluster device manager and a member device connected with the cluster device manager; wherein:

Please amend the seventh paragraph on Page 7 beginning on line 20 to read as follows:

~~a~~ an address translation module, designed to perform network address translation for management messages of member devices;

Please amend the eighth paragraph on Page 7 beginning on line 22 to read as follows:

a Dynamic Host Configuration Protocol (DHCP)-like module, designed to accomplish allocation of private IP addresses to member network devices;

Please amend the ninth paragraph on Page 7 beginning on line 24 to read as follows:

a first cluster member management module, which is connected with the address translation module A11, the DHCP-like module A12 and a topological information processing module A14 individually, and designed to manage member network devices in a concentrate manner, and to forward management messages, which are from outside of the cluster and destined to member devices, ~~through the standard network address translation module~~ to respective member devices to process, so that the member devices can process the management messages according to normal processing process;

Please amend the first paragraph on Page 8 beginning on line 1 to read as follows:

a first topological information processing module, designed to detect the topological architecture of network and to acquire the information of topological architecture of network within a specified number of hops in the network;

Please amend the second paragraph on Page 8 beginning on line 5 to read as follows:

said member device ~~manager~~ comprises:

Please amend the third paragraph on Page 8 beginning on line 6 to read as follows:

a second cluster member management module, designed to accomplish cluster management at the member device end;

Please amend the fourth paragraph on Page 8 beginning on line 8 to read as follows:

a second topological information processing module, designed to accomplish detection of adjacent devices and response/forwarding of topology acquisition requests.

Please amend the third paragraph on Page 12 beginning on line 8 to read as follows:

management IP address of the management device: the IP address designed to identify the management device for communication in the cluster[[;]].

Please amend the third paragraph on Page 14 beginning on line 7 to read as follows:

name of member device: designed to identify the ~~name of the~~ member device.

Please replace the table listed on Page 14 between lines 11 and 12 for the one listed below:

Type (2 bytes)	Reserved (2 bytes)	Physical Address of Device in the network (6 bytes)

Please amend the second paragraph on Page 15 beginning on line 8 to read as follows:

in step 11, the cluster management device sends a cluster addition request to the candidate network device that can be added to the cluster. In step 12, the candidate device determines whether it can be added to the cluster according to its condition, e.g., whether the candidate device is in another cluster, or whether the software version in the device support cluster management; if the candidate device can not be added to the cluster, it terminates the addition process and feeds back a reject response to be added to the cluster to the cluster management device; otherwise, in step 13, the candidate device determines whether a super user password is set; if not, authentication is unnecessary, and the candidate device feeds back an accept response directly; if the device has set a password, the candidate device authenticates the cluster management device in step 14; if the

authentication is successful, the candidate device feeds back an accept response in step 15; otherwise the candidate device feeds back a reject message and terminates the cluster addition operation.

Please amend the third paragraph on Page 15 beginning on line 26 and ending on Page 16, line 9 to read as follows:

The device authentication operation described above is as follows: first, the candidate device returns a message containing a challenge for authentication to the cluster management ~~network~~ device; after receiving the message, the cluster management device utilizes the challenge to encrypt the authentication information including the authentication password of the candidate network device ~~and authentication password~~ (which may be a cluster management password sent by the cluster management ~~network~~ device), and then encapsulates the authentication information into a response message, and sends the message to the respective candidate device; after the candidate device authenticates and confirms the identity of the cluster management ~~network~~ device, it returns an accept acknowledge message to the cluster management ~~network~~ device.

Please amend the first paragraph on Page 16 beginning on line 10 to read as follows:

In step 16, after receiving the accept response from the candidate network device, the cluster management device allocates a cluster member identifier, a private IP address for management, and other configuration information to the candidate network device,

encapsulates the information and a password (may be encrypted) into a configuration message, and sends the message to the candidate device; after receiving the message, the candidate device parses out the configuration information including the password, the cluster management number, and the management private IP address therein, and records the configuration information sent from the cluster management device, then, the candidate network device changes its role to a member switch, and then returns a complete message to the cluster management device; after receiving the complete message from the candidate network device, the cluster management device identifies the candidate network device as a cluster member. Thus, the candidate device addition process ends.

Please amend the second paragraph on Page 17 beginning on line 7 to read as follows:

[[a]] an address translation module A11, designed to perform network address translation for management messages of member devices;

Please amend the fourth paragraph on Page 17 beginning on line 12 to read as follows:

a cluster member management module A13, which is connected with the address translation module A11, the DHCP-like module A12 and a topological information processing module A14 individually, and designed to manage member network devices in a concentrate manner, and to forward management messages, which are from outside

of the cluster and destined to member devices, ~~through the standard network address translation module~~ to respective member devices to process, so that the member devices can process the management messages according to normal processing procedures;

Please amend the sixth paragraph on Page 17 beginning on line 23 to read as follows:

the member device ~~manager~~ A2 ~~is disposed in the managed member device and~~ is designed to implement management at the member device side in the cluster management, comprising:

Please amend the first full paragraph on Page 18 beginning on line 1 and ending on Page 19, line 3 to read as follows:

When above apparatus is used for cluster management of network devices, first, the topological information processing module A14 acquires information of topological architecture of network within a specified number of hops in the network through the topological information processing module A22 at the candidate device side, and sends the information to the cluster member management module A13; the cluster member management module A13 sends a cluster addition request to the cluster member management module A21 in the candidate device that can be added to the cluster; the cluster member management module A21 determines whether to be added to the cluster according to its conditions, and feeds back an accept or a reject response to the cluster member management module A13; when the cluster member management module A13

receives an accept message from the candidate device, the DHCP-like module A12 performs allocation of a private IP address of member network device and sends the private IP address, together with configuration information including member number, handshaking interval, and state retention time etc, to the cluster member management module A21 in the candidate device via the cluster member management module A13; the cluster member management module A21 uses the information to configure the candidate device accordingly, and feeds back a complete response to the cluster management device after the configuration operation. After the candidate device becomes a member device of the cluster, the management messages, which are from outside of the cluster and destined to the member device, will be processed in standard network address translation at the translation module A11 and then forwarded to the cluster member management module A21 of the respective member device via the cluster member management module A13, so that the member device can process the management messages through usual processing procedures.

Please amend the first full paragraph on Page 21 beginning on line 26 and ending on Page 22, line 14 to read as follows:

After obtaining the information of topological architecture of network through the topological information processing module, the command switch begins to establish a cluster. In particular, first, the cluster member management module at the command switch end obtains information of relevant candidate switches (i.e., network devices that can be added to the cluster but haven't been added to) from the topological information

processing module, and then cooperates with the cluster member management module ~~at the~~ of each candidate switch ~~end~~ to add the candidate switches to the cluster in auto mode (i.e., add all candidate switches to the cluster automatically) or manual mode (i.e., the user specifies the candidate switches to be added to the cluster from the list of candidate devices). If the user has known the information (e.g., MAC Address) of the candidate network device, the step of acquiring the information of topological architecture performed by the topological information processing module may be omitted, and the user may add the device to the cluster through manual operation directly.